Field Dental Treatment Facility

Terminal Learning Objective -

Selection of the correct sequence of events concerning the setup and postoperative recovery of a Field Dental Treatment Facility (FDTF), and the setup of the M40, M60 and M100 DISE IAW FM 4-02.19

Enabling Learning Objectives

- From a list, select the correct sequence of events in the setup of a FDTF as stated in FM 4-02.19

- Given a list of dental equipment and a description of their function, match the statement to the appropriate piece of equipment

- From a list of postoperative recovery tasks necessary for the recovery of the FDTF, identify the major areas of consideration

Field Dental Treatment Facility Setup (Sequence Of Events)

- Coordinate with host unit Commander location of the DTF.

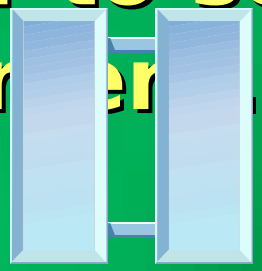
- Download all tentage, poles, liners, flooring , stakes, and mallets.

- Erect tentage using both the flooring and liner.
- Use longer stakes if the ground is wet or sandy.
- Use metal stakes in hard ground or during the winter.

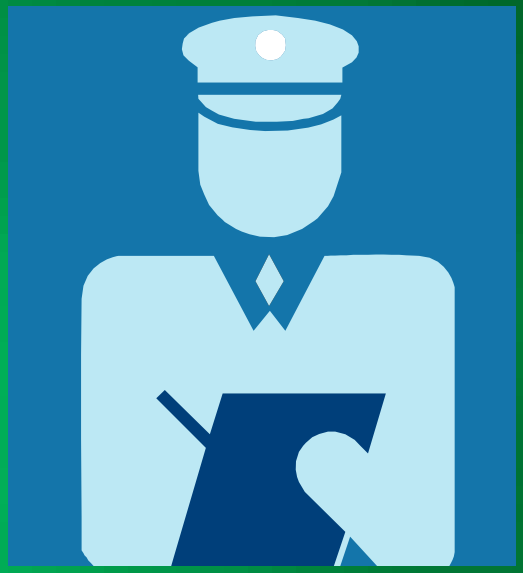
If the sides of the tent are to be rolled up, be sure they are rolled INWARD to prevent rain and debris from gathering in the rolls.

Download and setup all dental equipment according to the floor plan for the FDTF. (Annex A)

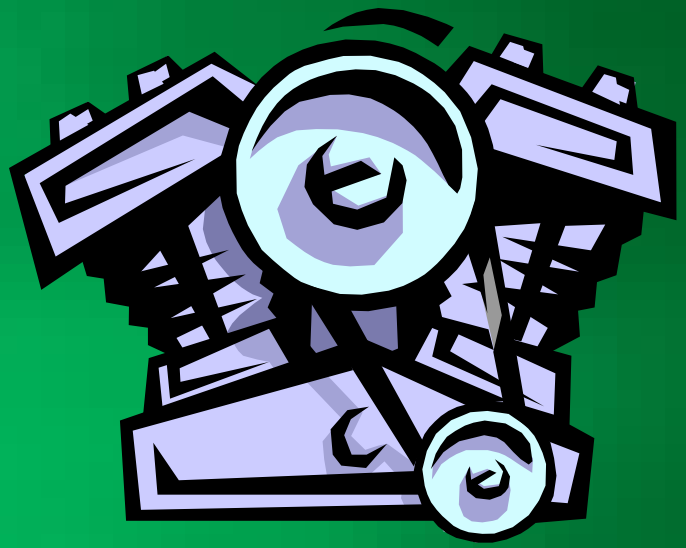
On Section III Forward treatment teams, it is the responsibility of the Dental Officer to set up the dental equipment.



The FDTF OIC will inspect the equipment for proper operation and the area for cleanliness after the equipment has been set up.



Downloaded and setup power generation and distribution equipment



Ensure that the generator trailer is chocked.

Ground generator.

Connect pigtail to the generator.

PMCS the c tor prior to operation.

Fuel Cans Area

All fuel cans will be kept 50 feet away from the FDTF

White engineer tape will

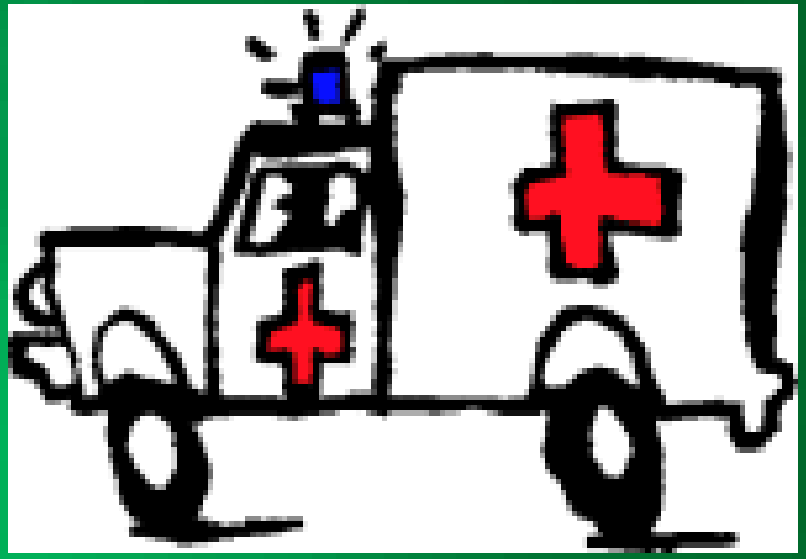
A no smoking sign will be placed in the fuel cans area

Inform the host’s unit Commander upon setup

Field Dental Equipment Setup

Prior to the operation of any piece of equipment the operator must be licensed or certified

The operator should be knowledgeable on all assigned equipment in the FDTF



The operator will receive periodic training on equipment to maintain a high skill level

Dental chair and stool

- When operating the dental chair and stool unit, ensure all pins and bolts are secure, and that the chair will rise, lower, and recli

- Place chair in an area easily accessible to the patient, doctor, and assistant
- Utilize the dental chair and stool IAW TMs and Manufacturer's Instructions.

Dental Operating and Treatment Unit (ADEC) and the Lightweight Dental Operating Unit

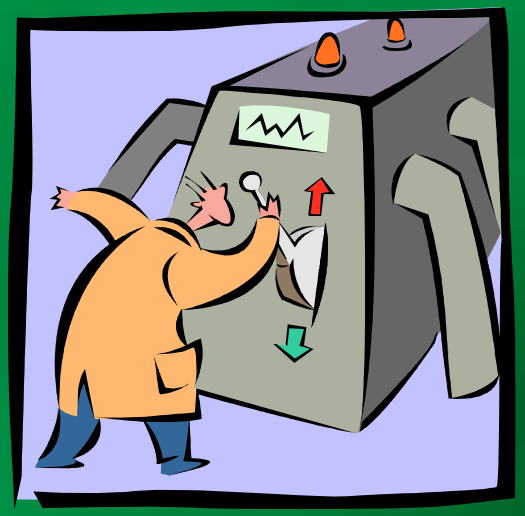
Before operation of the ADEC ensure:

All air hoses are free of kinks

The rheostat is operational

The suction is operational

Utilize the dental operating and treatment unit IAW TMs and Manufacturer’s Instructions



The Compressor

The air tank is drained at the end of the work day

The cover is properly placed on the compressor

Check moisture indicator daily

Utilize the compressor IAW TMs and manufacturer’s instructions

Dental Light

During operation ensure:

Light cover is properly secure

Dental light is plugged in above the floor

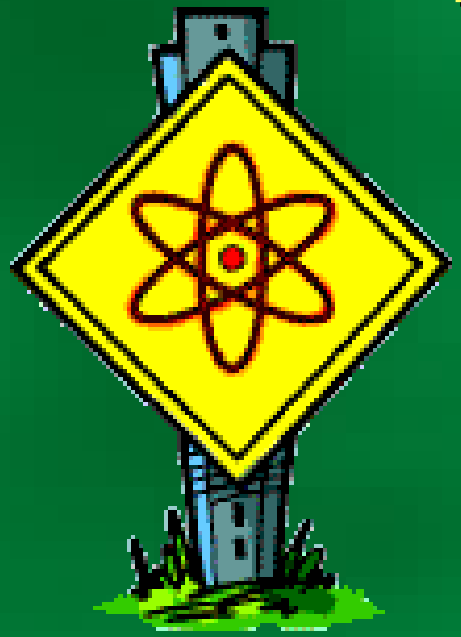
The cord is not in the way of the assistant or doctor.

The head of the light does not sway.

Utilize the dental light IAW TMs and Manufacturer's Instructions.

Field X-ray Unit.

Safety is the greatest consideration in the location and operation of the X-ray within the FDTF.



Location

Section III teams (Forward Treatment Teams) will have the X-ray unit located in the Clinic GP small tent, unless other arrangements can be made by the OIC.

Section II and III (General Dentistry and Prosthodontics Sections) will locate their X-ray unit in a separate GP Small Tent or away from the population.

The person exposing the film should be

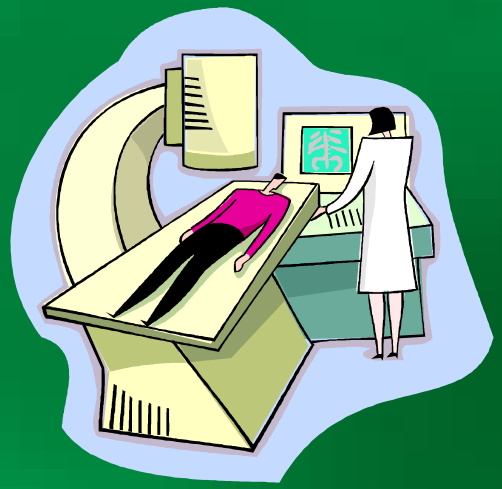
Behind a lead shield or at least 6- feet away.

Not in the line of the X-ray beam.

The X-ray area of operation should be:

Marked outside the tent with the appropriate radiation warning sign.

During operation ensure:



X-ray apparatus is properly mounted.

Cord is plugged in above the floor.

Chair is secure and level

Dial settings are correct

X-ray Processor

During operation ensure:

Developer, fixer, and water are filled to proper levels and are satisfactory for processing film.

Check the processor for light leaks.

Fluids are placed in proper order.

Utilize the dental X-ray processor IAW Tms and Manufacturer’s Instructions.

Sink

The hoses are connected to the proper coupling.

The water used is clean.

Motor is operational, unless water supply is hooked up for gravity feed.

The sink is properly secured to the base.

The water can receiving the

contaminated water is properly labeled.

Utilize the dental sink IAW TMs and Manufacturer's Instructions.

Sterilizer

During operation ensure:

Sterilizer is filled with distilled water

Chamber is cleaned weekly and functioning properly.

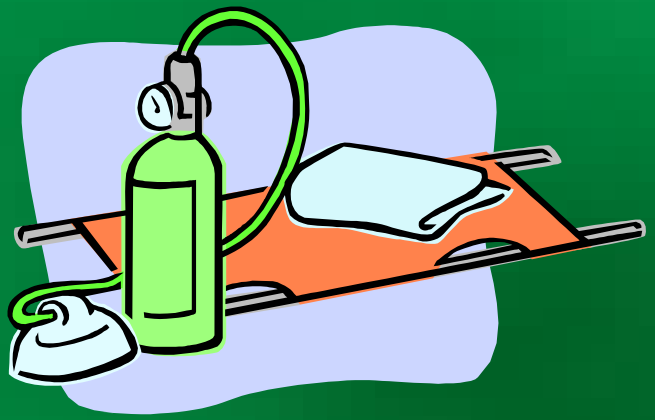
The cord is plugged in above the floor.

Spore tests are performed IAW Infection Control SOP.

Log book is maintained for each sterilizer.

Utilize the dental sterilizer IAW TMs and Manufacturer's Instructions.

Resuscitator



During operation ensure:

The oxygen is at a usable level.

The tank is clean.

The lines are hooked up correctly.

Tank lines are bled of oxygen daily.

Utilize the dental resuscitator IAW Ms and Manufacturer’s Instructions.

Suction Apparatus (GOMCO)

During operation ensure:

Oil level is filled

Bottles are clean and installed

Cord is plugged in above the floor

Proper pressure level is present

Utilize the dental suction apparatus IAW TMs and Manufactu[illegible]uctions

Amalgamator

During operation ensure:

Capsule cover works properly

Loose amalgam capsule are not in the
bottom of the amalgamator.

Amalgamator is calibrated once

Dental Laboratory Lathe

Never run the lathe without a bur in the chuck

Wear safety glasses and ear protection while operating the lathe

Dental Laboratory Handpiece

Ensure bur is securely fastened in handpiece

Do not operate handpiece with a broken or frayed drive belt

Wear safety glasses and e protection while operating handpiece.

Stove (Space Heater)

Place heater base on ground or floor of tent.

In tents with a wooded floor the heater should be placed in a sand box.

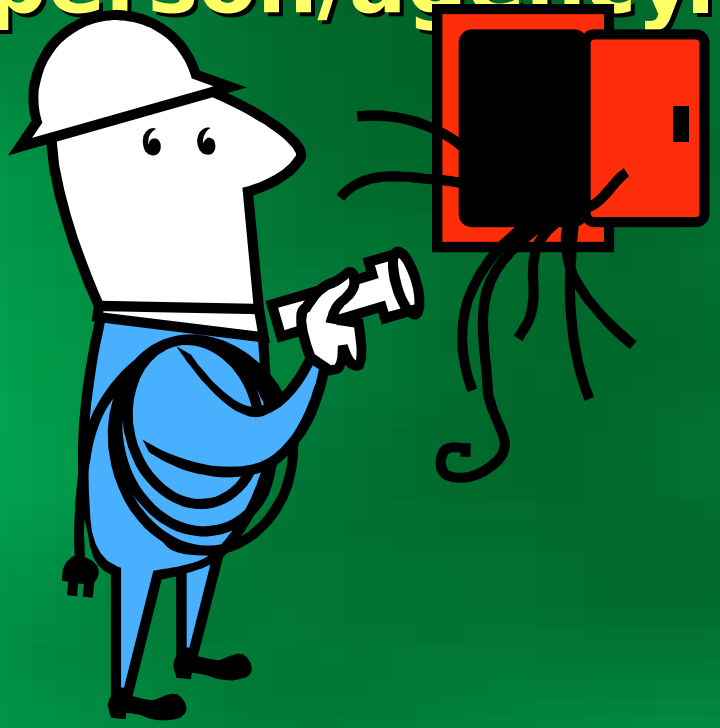
The sandbox should be a rectangle, 40 inches by 28 inches. there should be a minimum of 3 1/2 inches of sand between the bottom of the stove and sheet metal bottom of the sandbox.

Combustible materials will be at least four feet away from the stove

Power Distribution Setup

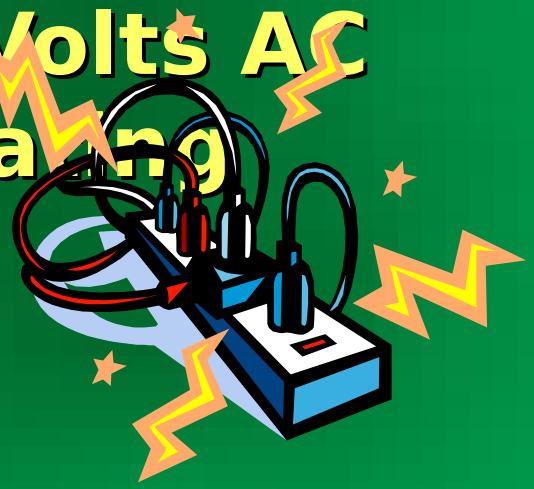
WARNING: DEATH ON CONTACT may result if personnel fail to observe safety precautions

WARNING: Prior to working with the power distribution system, you should be licensed/certified by the appropriate person/agency.

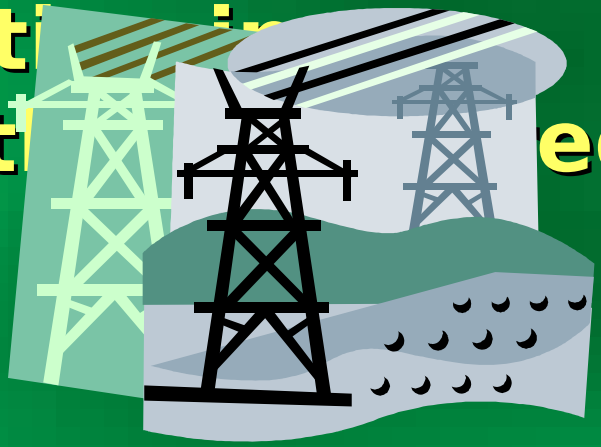


Never work on electrical equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid or CPR. When the technician is aided by operators, s/he must warn them about dangerous areas.

The power supply to the the equipment must be shut off before beginning work on the equipment. The power source must be grounded at all times when equipment is in use or being worked on. Be careful NOT to contact high-voltage connectors of 120/208 Volts AC when installing or operating this equipment.



WARNING: High voltage is present in this system. DISE supports equipment using 120/208 V AC. Do NOT rely on the cable jacket. They may vary, depending on supplier. Wires will be marked with continuity test to verify correct phase designati in accordance wit ed tape.



Checklist for M40 and M100 DISE

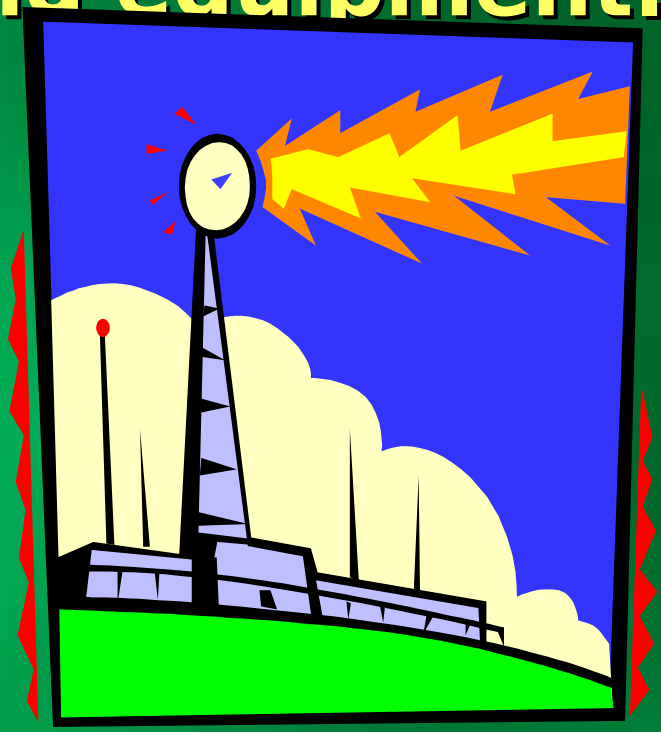
When using 15kw and larger generators:

Determine where the equipment **be located**

Analyze the electrical equipment needs in the particular field application.

Know the terrain to determine special considerations for grounding and routing of cables.

Be familiar with tactical or other restrictions when locating the power source relative to tents, shelters, and other power consuming equipment.



Develop an actual power distribution plan, based on the analysis that allows for terrain and tactical constraints and provides distributed electrical power from the least number of generators as possible.

Start analysis at the consuming of the network and work towards to the power source. If amperage data is not available , use the fuse rating to compute power rating.

When the total electrical wattage is calculated, divide total power by 1000, this will give you the kilowatts of power to be consumed

Determine amount, type, and location of the M40, M60, M100, M200 amp distribution systems needed. Locate the equipment close to the power source, to reduce or eliminate the need for feeder systems and additional cabling.

The M40 and M60 CANNOT be used in series or be connected to each other. The M60 is a stand alone system and should be used with smaller rated generator sets (generally 5KW).

M100 feeder system is normally used with one or more M40 distribution systems, and the M200 system with two or more M100 distribution systems, when additional capacity is needed.

M40 or M60 distribution panels are to be used to power utilities and equipment, either 110 or 220 V, 50 or 60 Hz.

Run the 50-foot extension cable assembly(s) from the equipment area to the M40 power distribution center.

Start at the work area and lay your cables towards the power distribution center and generator.

Ensure you have a sufficient number of M46 Electrical Utility Kits to support the tentage and work area being used.

Assemble the M46. Connect the Duplex Receptacle Boxes to the Branch Circuit Cable. connect the branch Circuit Cable to the 20 AMP output connector of the M40 with a 50 foot Extension Cable Assembly.

Connect the M40 power distribution center(s) to the M100 power distribution center with Service Feeder Cables.

Connect the M40 to the M100 with a 25- foot or 50-foot Service Feeder Cable.

AVOID using the 100-foot Service Feeder Cables because you will lose voltage and power.

The M40 power distribution centers are only connected with each other by the J-1 and J-2 40 AMP input and output ports.

Ground the generator (Ensure the generator grounding rod is at least 9 feet deep or thoroughly wetted down in the modified grounding situation).

Connect the M100 power distribution to the generator with the pigtail.

BLACK wire is connected to L1.
RED wire is connected L2.
BLUE wire is connected to L3.
WHITE wire is connected to L0.
GREEN wire is connected to the Ground Terminal.

Dental Facility Breakdown

Dental aid bags will be available in the event there is a dental emergency during the breakdown or relocation of the FDTF.

Perform a sensitive item check prior to breakdown. Stacking of weapons and web gear is permitted.

Ensure that the water is drained from the dental unit and the sterilizer before they are packed.

Ensure the compressor air tank is
drained prior to placing it in the container.

Ensure that the x-ray developing solutions are drained and stored properly.

Secure dental hand pieces inside the dental chest.

Turn off generator prior to striking the tentage.

Load the equipment on to the vehicle and trailer according to the load plan.

Clean the tentage and place the tentage inside the proper cover.

Tape all tent poles together.

Place all tent stakes in the proper box or in a sandbag.

Breakdown the power generation system and store all branch cords and lights in the appropriate containers.

Complete the loading of the vehicle and trailer according to the load plan.

All fuel cans will be securely placed in the trailer.

Hook the trailer to the vehicle and check the brakes and lights.

Perform a sensitive item check.

Notify the host unit Commander that the EDTF is

Questions??